VILYANSKIY, I.M.; KLIMOV, V.I.

Photo attachment for a rectoromanoscope. Zhur.mikrobiol. epid. i immun. 31 no.3:124-126 Mr '60. (MIRA 14:6)
(PROCTOSIGMOIDOSCOPY—EQUIPMENT AND SUPPLIES)

VILYANSKIY, I.M., kand.med.nauk, podpolkovnik meditsinskoy sluzhby; PAVLOV, V.F.

Portable thermostat. Voen.-med.zhur. no.8:80 Ag '59.
(MIRA 12:12)

(LABORATORIES, equipment & supplies)

VIL'NYANSKIY, L. I.

VIL'NYANSKIY, L. I.: "Tuberculosis and diabetes mellitus." Khar'kov Medical Inst. Khar'kov, 1956. (Dissertion For the Degree of Doctor in Medical Sciences.)

Knizhnaya letopis', No. 39, 1956. Moscow.

VILYaNSKIY, M. P.

23639.

METOD PRIZhIZNENNOY VAZOGRAFII PRI OPREDELENII DINAMIKI RAZVITIYa KOLLATERAL'NOGO KROVOOBRAShchENIYa V EKSPERIMENTE I KhIRURGIChESKOY KLINIKE. KhIRURGIYa, 1949, N . 7, c. 12-18.

SO: LETOPIS' NO. 31, 1949

BRUK, A.M.; VILIANSKIY, M.P.

Problem of the significance of serial vasography during life as a diagnostic method in diseases of the arterial system (answer to A.N. Shabanov's artrils "Arteriography in endarteritis obliterans"). Khirurgiia, Moskva No.2:51-59 Feb 51. (CLML 20:6)

1. Of the Faculty Surgical Clinic of the Sanitary-Hygienic Faculty (Director--Prof.I.S.Zhorov), First Moscow Order of Lenin Medical Institute, attached to the Clinical Hospital of Zhdanovskiy Rayon, and of the Department of Operative Surgery (Head--Docent A.M.Bruk) of Chelyabinsk Medical Institute attached to Chelyabinsk Oblast Hospital of Restorative Surgery (Head--M.M.Orzhekhovskaya).

BRUK, A.M.; VILYANSKIY, M.P.

Collateral circulation in experimental section of the saphenous nerve; roentgenovasographic study. Vopr. neirokhir. 16 no. 3:43-47 May-June 1952. (CLML 22:5)

1. Docent for Bruk; Candidate Medical Sciences for Vilyanskiy.
2. Of the Department of Operative Surgery (Head -- Docent A.M. Bruk), Chelyabinsk Medical Institute (Director -- Prof. G. D. Obraztsov).

BRUK, A.M.; VILYANSKIY, M.P.

Pathogenesis of appearance of trophic disorders in gun-shot injuries of the sciatic nerve. Vest. khir. Grekova, Leningr. 72 no. 4:49-53 July-Aug. 1952. (CLML 22:5)

1. Docent for Bruk: Candidate Medical Sciences for Vilyanskiy. 2. Of the Department of Operative Surgery (Head -- A. M. Bruk, Chelyabinsk Medical Institute located at Chelyabinsk Oblast Hospital of Restorative Surgery (Head -- M. M. Orzhekhovskaya).

BRUK, A. M., Docent; VIL'YAMSKIY, L. P.; YAKOB'YEVA, A.; KHALANOVA, M.

Heart - Diagnosis

Methods of experimental contrast angiocardiography. Vest. rent. i rad. No. 1, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. Uncl.

VILYANSKIY, M.P., kandidat meditsinskikh nauk

Cancer of the mammary gland in a thirteen-year-old girl. Pediatriia no.3:79-80 My-Je '55. (MLRA 8:10)

1. Iz bol'nitsy g. Zhukovskogo Moskovskoy oblasti (glavnyy vrach--zasluzhennyy vrach RSFSR E.A.Kikabidze)
(BREAST, neoplasms
in 13-year-old girl, diag. & surg.)

VILYANSKIY, M.P., kandidat meditsinskikh nauk.,; LAVROVA, T.A.

Acute intestinal obstruction unusual in women. Akush. i gin. 32 no.1:78-79 Ja-F '56 (MLRA 9:6)

1. Iz khirurgicheskogo otdeleniya (zav. M.P. Vilyanskiy) bol'nitsy g. Zhukovskogo Moskovskoy oblasti.
(INTESTINAL OBSTRUCTION
acute in women)

VILYANSKIY, M.P., kandidat meditsinskikh nauk.,; KAZUTO, M.M.

Perforation of the small intestine. Vest. khir. 77 no.1:118-120 Ja '56 (MLRA 9:5)

1. Iz khirurgicheskogo otdeleniya (zav.-M.P. Vilyanskiy) Zhukovskoy gorodskoy bol'nitsy (Moskovskaya oblast')

(INTESTINE, SMALL, neoplasms
Hodgkin's dis. causing perf., surg.)
(HODGKIN'S DISEASE
small intestine, causing perf., surg.)

BAIBAPCHIK, A.G.; VILYANSKIY, M.I.; [illegible]

Repeated operations on the stomach using resectional autoplasty. Sov. med. 28 no.8:15-19 Ag '65. (MIRA 18:9)

1. Fakul'tetskaya khirurgicheskaya klinika (zav. - prof. M.I. Vilyanskiy) Omskogo meditsinskogo instituta imeni Kalinina na baze Omskoy oblastnoy klinicheskoy bol'nitsy (glavnyy vrach - zasluzhennyy vrach RSFSR K.I.Shekhurdina).

YAKUBOVICH, I.A.; PASKHIN, N.P.; VILYANSKIY, M.P.; BABIN, S.Ye.; SLAVUTSKAYA, N.I.; Prinimali uchastiye: PARADNYA, P.I.; RUPNEVSKAYA, M.L.; PURISMAN, V.I.; LEONOVA, L.F.; PACHKOV, A.S.; BACHURINA, K.M.; FECHIN, M.I.; YUKSINA, L.A.; PONOMAREV, Yu.F.; DYMOVICH, Ye.I.; PIKUSOVA, R.A.

Production and use of synthetic water-soluble polyacrylamide adhesives. Ferm. i spirt.prom. 30 no.8:32-34 '64.

(MIRA 18:1)

1. Moskovskiy likero-vodochnyy zavod.

VILYANSKIY, M.P.; KAYGORODOVA, N.V.

Recurrent embolism of the popliteal artery. Vest. khir. 70 no.6:120-121 Je'63 (MIRA 16:12)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav. - doktor med. nauk M.P.Vilyanskiy) Omskogo meditsinskogo instituta imeni M.I.Kalinina na baze oblastnoy klinicheskoy bol'nitsy (glavnyy vrach - zasluzhennyy vrach RSFSR K.I.Shakhurdina). Adres Vilyanskogo: Omsk, ul. Lenina, d.9, Omskiy meditsinskiy institut.

YAKUBOVICH, I.A.; PARADNYA, P.I.; PASHKIN, N.P.; VILYANSKIY, M.P.

Method of preparing crystalline acrylamide. Khim. prom. no.8:570-572 Ag '63. (MIRA 16:12)

VILYANSKIY, M.P., kand.med.nauk (Zhukovskiy, Moskovskoy oblasti, ul. Moskovskaya, d.4, kv.28); GAL'PERIN, Yu.M., kand.med.nauk

Method of combined treatment of late stages of endarteritis obliterans. Nov. khir. arkh. no.4:112 Jl-Ag '60. (MIRA 15:2)
(ARTERIES--DISEASES)

VILYANSKIY, M.P., kand.meditsinskikh nauk (Moskovskaya oblast', gorod Zhukovskiy, Moskovskaya ul., d.4, kv.28)

Use of triiodotrast for angiography in obliterating endarteritis of the lower extremities. Vest.khir. 83 no.11:52-53 N '59.
(MIRA 13:4)

1. Iz kafedry operativnoy khirurgii i topograficheskoy anatomii (zav. - prof. V.V. Kovanov) 1-go Moskovskogo ordena Lenina meditsinskogo instituta i khirurgicheskogo otdeleniya bol'nitsy gor. Zhukovskogo Moskovskoy oblasti (glavnyy vrach - zasluzhennyy vrach RSFSR Ye.A. Kikabidze).

(LOWER EXTREMITIES--RADIOGRAPHY)
(ANGIOGRAPHY)
(CONTRAST MEDIA)

VILYANSKIY, M. P., Doc Med Sci -- (diss) "Research and stimulation of collateral blood circulation in affected vessels of the lower extremities. (Clinicoexperimental X-ray vasographic research)." Moscow, 1960. 23 pp; (First Moscow Order of Lenin Medical Inst im I. M. Sechenov); 250 copies; price not given; list of author's works at end of text (10 entries); (KL, 17-60, 166)

VILYATSER, M.G., inzh.

Effect of the traveling speed of planters on the flow of tree seeds. Trakt.i sel'khozmash. 31 no.9:25 S '61. (MIRA 14:10)

1. Belorusskiy nauchno-issledovatel'skiy institut lesnogo khozyaystva.
(Planters (Agricultural machinery)) (Afforestation)

69490

S/020/60/131/04/03/073

16.2000

AUTHOR: Vilyatser, V.G.

TITLE: Stable Groups of Automorphisms

PERIODICAL: Doklady Akademii nauk SSSR, 1960,Vol.131, No.4, pp 728-730

TEXT: The set of automorphisms Σ of the group G is called stable if G has an increasing normal Σ -stable series. If in G there exists a local system of Σ -admissible subgroups in which Σ induces stable sets of automorphisms, then Σ is called a locally stable set of automorphisms. If the Σ -stable series is finite, then Σ is called an externally nilpotent set.
Theorem 1: Let G be a group with maximal condition, let Φ be its externally nilpotent group of automorphisms. Then Φ is nilpotent.
Theorem 2: The radical of an arbitrary group is identical with the set of all locally stable elements.
Theorem 3: A finite group of locally stable automorphisms ϕ of an arbitrary group G is nilpotent.
The proofs base on results of L.A.Kaluzhnin and B.I.Plotkin. There are 9 references, 8 Soviet and 1 German.

ASSOCIATION: Ural'skiy gosudarstvennyy universitet im. A.M.Gor'kogo
(Ural State University im. A.M.Gor'kiy)

PRESENTED: December 1, 1959, by A.I.Mal'tsev, Academician
SUBMITTED: October 23, 1959

Card 1/1

VOLODIN, V.Ye.; PAKHOMOV, N.M.; DERESHKEVICH, Yu.V.; PASECHNIK, K.A.; BUKHARIN, Ye.V.; MOISEYEVA, Ye.I., Prinimali uchastiye: GRISHIN, M.Ye., inzh.; PROTOSAVITSKAYA, Ye.A., inzh.; GOFEN, D.A., inzh.; VINARSKIY, V.I., inzh.; PLUTENKO, V.P., inzh.. MOSHCHANSKIY, N.A., nauchnyy red.; TYAPKIN, B.G., red.izd-va; GURVICH, E.A., red.izd-va; MEDVEDEV, L.Ya., tekhn.red.

[Anticorrosive coatings for construction elements and apparatus; handbook] Antikorroziinye pokrytiia stroitel'nykh konstruktsii i apparatury; spravochnoe posobie. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1959. 266 p. (MIRA 13:4)

1. Russia (1917- R.S.F.S.R.). Glavnoye upravleniye po montazhu tekhnologicheskogo oborudovaniya i proizvodstvu montazhnykh rabot. 2. Proyektno-konstruktorskoye byuro tresta Montazhkhimzashchita (for Volodin, Pakhomov, Dereshkevich, Pasechnik, Bukharin, Moiseyeva).
(Protective coatings) (Building materials)

T

COUNTRY :USSR
CATEGORY :Human and Animal Physiology, Circulation

ABS. JOUR. : RZhBiol., No. 5 1959, No. 22104

AUTHOR :Vilyanskiy, M.P.
INST. :Moscow Medical Institute
TITLE :Collateral Circulation When the Saphenous Nerve is Treated with Alcohol and Novocaine (An Experimental Roentgenovasographic Study).
ORIG. PUB. :Tr. 1-go Mosk. med. in-ta, 1958, 6, 67--71

ABSTRACT : In order to study the possible means of influencing circulation in the presence of trophic disturbances, the author experimentally studied the development of collateral circulation in the hind limbs of dogs after ligation of both femoral arteries. One ml of 70% alcohol was injected into the left saphenous nerve following the ligation. A study of the vasoroentgenograms for a period of 24 hours to 5½ months showed that the injection of alcohol results in a steady increase in the number of collateral arteries after a brief

Card: 1/2

COUNTRY : USSR
CATEGORY : T

ABS. JOUR. : RZhBiol., No. 5 1959, No. 22104

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : reduction in their number. The injection of 1 ml of a 1% solution of novocaine into the saphenous nerve instead of the alcohol gave only a brief (7 to 10 day) increase in the number of collateral arteries. By means of serial vasography (using sergosine) it is possible to study the role of nervous regulation in the restoration of circulation after ligation of the femoral arteries.--Z.D.Dukhanina

Card: 2/2

VILYANSKIY, M.P., kand.med.nauk; LEBEDEV, M.S.; SHVANKOVA, Z.P.

Case of acute hemorrhage in chorioepithelioma. Akush. i gin. 35 no.3:122-123 My-Je '59. (MIRA 12:8)

1. Iz bol'nitsy (glavnyy vrach - zasluzhennyy vrach RSFSR Ye.A.Kikabidze), g. Zhukovskiy Moskovskoy oblasti.
(CHORIOCARCINOMA, case reports
uterus, with acute hemorrh. (Rus))
(UTERUS NEOPLASMS, case reports
choriocarcinoma, with acute hemorrh. (Rus))

VILYANSKIY, M.P., kand. med. nauk (gor. Zhukovskiy, Moskovskoy obl. Moskovskaya ul., d.4, kv. 28); LUKASHINA, V.I.

Volvulus in a pregnant woman. Vest. khir. 82 no.6:121-122 Je '59.
(MIRA 12:8)
1. Iz khirurgicheskogo otdeleniya (zav. - M.P. Vilyanskiy) bol'nitsy gor. Zhukovskogo Moskovskoy oblasti.
(INTESTINES--OBSTRUCTIONS) (PREGNANCY, COMPLICATIONS OF)

VILYANSKIY, M.P.; LUKASHINA, V.I.

Pathology of Meckel's diverticulum. Khirurgiia Supolement:41-42 '57. (MIRA 11:4)

1. Iz Zhukovskoy gorodskoy bol'nitsy Moskovskoy oblasti.
(INTESTINES--DISEASES)

VILYANSKIY, M.P., doktor med. nauk, otv. red.; POLUEKTOV, L.V., red.; SHEKHURDINA, K.I., zasl. vrach RSFSR, red.

[Materials from the scientific session of the Department of Facultry, Surgery, devoted to the surgical treatment of diseases of the blood vessels and the organs of the gastro-intestinal tract]Materialy nauchnoi sessii kafedry fakul'tetskoi khirurgii, posviashchennoi khirurgicheskomu lecheniiu zabolevanii krovenosnykh sosudov i organov zheludochno-kishechnogo trakta. Omsk, 1962. 56 p. (MIRA 15:9)

1. Omsk. Meditsinskiy institut. Kafedra fakul'tetskoy khirurgii.
(BLOOD VESSELS—SURGERY) (ALIMENTARY CANAL—SURGERY)

VIL'NYANSKIY, Ya. Ye.

✓Thermal dissociation of magnesium hydroxychloride. Ya. E. Vil'nyanskii and E. I. Savinkova. *Zhur. Prikład. Khim.* 28, 804–71(1955); cf. *C.A.* 49, 7338i.—Available data on the thermal dissocn. of $MgCl_2$ are recalcd. to take into account the existence of solid solns. (cf. Ohukhov, *et al.*, *C.A.* 29, 7593³). The corrected free energy equation for the reaction $MgOHCl_{(s)} = MgO_{(s)} + HCl_{(g)}$ at 1 atm. is $\Delta F^\circ = 25830 - 9.58T \log T + 6.22 \times 10^{-3}T^2 + (1.044 \times 10^6/T) - 8.76T$. $\Delta F^\circ = 0$ at 550°; rapid heating of MgOHCl gives the transition at 548–555° (Kelley's value is at 550°). This indicates that the above reaction and $MgOHCl_{(s)} + HCl_{(g)} = MgCl_{2(\text{solid soln.})} + H_2O_{(g)}$ are the initial reactions of the process. The dissocn. pressure of MgOHCl P_{HCl} ($\Delta F^\circ = -RT \ln P_{HCl}$) plotted vs. the temp. gives a family of isobars in the range $P = 0.01 - 2$ atm. ($P = P_{HCl} + P_{H_2O}$) which consist of 2 intersecting curves. The line connecting these intersections, sepg. the areas of stable MgOHCl from $MgCl(Cl, OH)_{(\text{solid soln.})}$, is inclined toward lower P_{HCl}; thus the area of MgOHCl decreases as the temp. and P increase. The first part of each isobar rises abruptly and then flattens out; this indicates the instability of MgOHCl in an atm. of H_2O, especially at $P \geq 1$ atm. The 2nd part of the isobar rises continuously at increasing rates; this indicates the instability of the solid solns. in an atm. of HCl. For the reactions $MgOHCl_{(\text{solid soln.})} \rightleftharpoons MgO_{(s)} + HCl_{(g)}$ and $MgCl_{2(\text{solid soln.})} + H_2O_{(g)} \rightleftharpoons MgO_{(s)} + 2HCl_{(g)}$ the values of the corresponding equil. consts. K_1, K_2, ΔF_1°, and ΔF_2° at 300, 400, 500, and 600° are: 0.00832, 0.00342, 5450, 6460; 0.148, 0.0034, 2540, 3680; 1.30, 0.564, −400, 880; and 6.38, 2.83, −3210, −1800, resp. $K_1 = P_{HCl}/a_1$ and $K_2 = P_{HCl}/P_{H_2O}\, a_2$. The activities a_1 and a_2 were recorded previously (*loc. cit.*). I. Bencowitz

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S/020/60/134/003/026/033XX
C 111/ C 333

16.2000

AUTHORS: Plotkin, B. J., Vilyatser, V. G.

TITLE: On the Theory of Locally Stable Groups of Automorphisms

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 134, No. 3, pp. 529-532

TEXT: The notations are the same as in (Ref.1).

Theorem 1. A finite-stable group of automorphisms of an arbitrary group is nilpotent.

The theorem is already contained in the paper of Ph. Hall (Ref.7). From the proof, which is different from (Ref.7), it follows among others: If G possesses an increasing invariant ϕ -stable series, then the commutant $[G\,\phi]$ belongs to the centralizer of this series and, in particular, possesses itself an increasing central series.

Theorem 2: Let ϕ be a locally stable group of automorphisms of the group G. Assume that the periodical part in the radical of G is finite. The group ϕ is locally nilpotent, if and only if a local system of subgroups of finite rank is existing in it.

Card 1/3

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S/020/60/134/003/026/033XX
C 111/ C 333

On the Theory of Locally Stable Groups of Automorphisms

The proof is based on the following lemmata:

Lemma 1: Let Φ be a locally stable group of automorphisms of G. The periodic part of the radical of G is assumed to be finite and to have the order m, Φ is assumed to be a group of the finite rank r. Then the set of all elements of Φ of finite order is a subgroup of Φ which is identical with the Φ -centralizer of the factor group G/P. This subgroup is finite and its order is not greater than the number $m!m^r$.

Lemma 2: Let Φ be a stable group of automorphisms of G. If Φ has finitely many generators and finite rank, and if the periodic part of the radical of G is finite, then Φ is nilpotent.

Lemma 3: Assume that G possesses a local system of Φ -admissible subgroups G_α, let Φ induce in each of these subgroups a nilpotent group, the rank of which is $\leq r$, the order of which is $\leq k$ and the periodic part of which is finite. Then the whole group Φ is nilpotent.

Card 2/3

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S/020/60/134/003/026/033XX
C 111/ C 333

On the Theory of Locally Stable Groups of Automorphisms

L. A. Kaluzhnin is mentioned in the paper.

There are 7 references: 5 Soviet, 1 German and 1 American.

PRESENTED: May 9, 1960, by A. J. Mal'tsev, Academician

SUBMITTED: May 9, 1960

Card 3/3

VILYATSER, V.G.

Some examples of groups of isomorphisms. Dokl. AN SSSR 139 no.6:1283-1286 Ag '61. (MIRA 14:8)

1. Ural'skiy gosudarstvennyy universitet im. A.M. Gor'kogo. Predstavleno akademikom A.I. Mal'tsevym.
(Groups, Theory of)
(Isomorphism)

VILYATSER, V.G.

Theory of locally nilpotent groups. Usp.mat.nauk 13 no.2:163-168 Mr-Ap '58. (MIRA 11:4)
(Groups, Theory of)

VILYAVIN, O. D.

"Erysipeloid." Sub 19 Oct 51, Acad Med Sci USSR.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

VILYAVIN, G. D.

USSR/Medicine - Penicillin Aug 51

"Experience With Penicillin for the Treatment of Erysipeloid" G. D. Vilyavin, L. Ye. Ryizhik, Moscow

"Sov Med" No 8, p 30

Expts have been carried out by infecting mice with human erysipeloid bacilli and with swine erysipelas and injecting strong doses of penicillin subcutaneously. The mice survived. Later clinical tests were carried out on human erysipeloid patients who received doses of penicillin of between 50,000-100,000 units every 3 hrs until 500,000-1,000,000 units had been given. The

204T47

USSR/Medicine - Penicillin (Contd) Aug 51

itching disappeared after 2-3 days. At the end of the treatment all clinical symptoms had disappeared.

204T47

VILYAVIN, G.D.

Erysipeloid in the etiology of intra-phalangela arthritis. Khirurgiia, Moskva no. 7:35-41 July 1952. (CLML 23:1)

1. Doctor Medical Sciences. 2. Of the Institute of Surgery imeni A. V. Vishnevskiy, Academy of Medical Sciences USSR.

VILYAVIN, S. D.

USSR/Medicine - Burns Oct 53

"Review of B.N. Postnikov's 'A Modern Treatment of Burns,' [Sovremennoye Lecheniye Termicheskikh Ozhogov] Acad of Med Sci USSR, Moscow 1952, 105 pp" (S.D. Vilyavin, reviewer)

Khirurg, No 10, pp 90-93

The reviewer notes the reputation and personal experience of the author, who is Head of the Specialized Dept for Treatment of Burns, Leningrad Sci Res Inst of Emerg Aid im Yu Yu Dzhanelidze. Notes the decrease in mortality rate from burns treated at this Inst. Lauds the presentation of an effective method of treating burns by hemotransfusion, the novocain block of A.V. Vishnevskiy, and drug-induced sleep. Disagrees with some proposed methods of treatment. On the whole, highly recommends the book as a practical textbook for Soviet surgeons.

273T45

Translation M-1857, 16 Feb 55

273T45

VILYAVIN, O.D.; SEROMYEVA, K.A.

Problem of pathogenesis of erysipeloid; plethysmography of vascular reactions. Klin. med., Moskva 31 no.4:55-58 Apr 1953. (CIML 24:4)

1. Of the Institute of Surgery imeni A. V. Vishnevskiy (Director -- Prof. A. A. Vishnevskiy), Academy of Medical Sciences USSR.

VILYAVIN, G.D. (Moscow); SERGEYEVA, K.A. (Moscow); VISHNEVSKIY, A.A., professor, direktor.

Problem of the pathogenesis of erysipeloid; plethysmography of vascular reactions. Klin.med. 34 no.4:55-58 Ap '53. (MLRA 6:7)

1. Institut khirurgii imeni A.V.Vishnevskogo Akademii meditsinskikh nauk SSSR. (Skin--Diseases) (Blood--Circulation)

VILYAVIN, G.D.

[Erysipeloid] Erizipeloid. Moskva, Medgiz, 1955. 201 p.
(Erysipeloid) (MLRA 8:6)

VILYAVIN, G.D., professor

Method of documenting burns according to their degree, localization, and extent. Khirurgiia no.5:20-24 My '56. (MLRA 9:9)

1. Iz 3-go khirurgicheskogo otdela (zav. G.D.Vil7avin) Instituta khirurgii imeni A.V.Vishnevskogo (dir.-chlen-korrespondent AMN SSSR A.A.Vishnevskiy) AMN SSSR.

(BURNS,
description of degree, localization & severity (Rus))

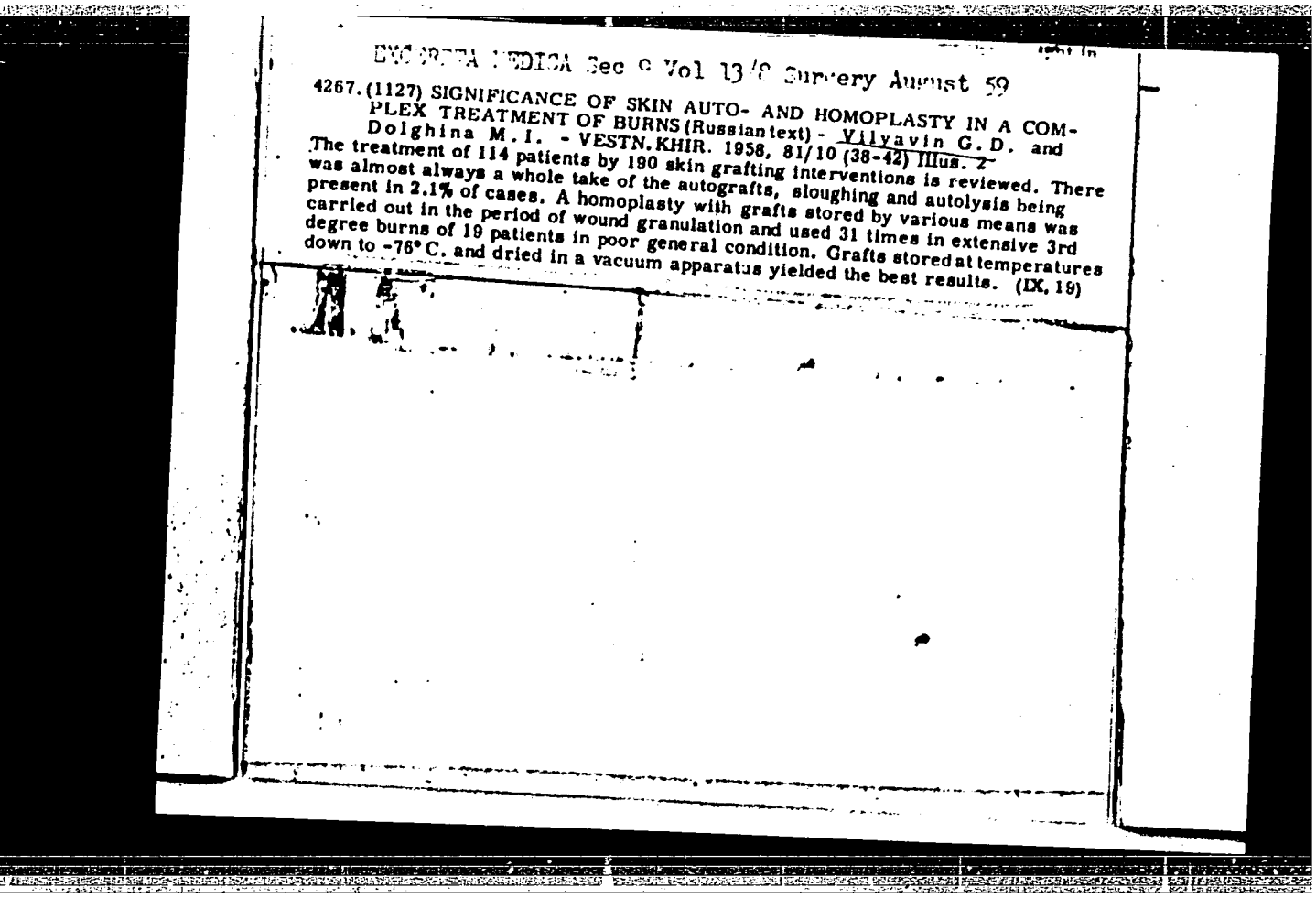
VILYAVIN, G.D., prof. (Moskva, D-167, 1-y proyezd aeroporta, d.2/1, kv. 5); DOLGINA, M.I.

Significance of auto- and homotransplantation of skin in combined treatment of burns [with summary in English]. Vest.khir. 81 no.10 38-42 O '58 (MIRA 11:11)

1. Iz Instituta khirurgii imeni A.V. Vishnevskogo (dir. - prof. A.A. Vishnevskiy) AMN SSSR.

(SKIN TRANSPLANTATION,
in combined burn ther. (Rus))

(BURNS,
skin transpl. in combined ther. (Rus))



EXCERPTA MEDICA Sec 9 Vol 13/9 Surgery August 59

4267. (1127) SIGNIFICANCE OF SKIN AUTO- AND HOMOPLASTY IN A COMPLEX TREATMENT OF BURNS (Russian text) - Vilyavin G. D. and Dolghina M. I. - VESTN. KHIR. 1958, 81/10 (38-42) Illus. 2

The treatment of 114 patients by 190 skin grafting interventions is reviewed. There was almost always a whole take of the autografts, sloughing and autolysis being present in 2.1% of cases. A homoplasty with grafts stored by various means was carried out in the period of wound granulation and used 31 times in extensive 3rd degree burns of 19 patients in poor general condition. Grafts stored at temperatures down to -76° C. and dried in a vacuum apparatus yielded the best results. (IX, 19)

VILYAVIN, G.D., prof.

Plastic surgery in burns. Khirurgiia 35 no.7:21-26 Jl '59.
(MIRA 12:12)

1. Iz Instituta khirurgii imeni A.V. Vishnevskogo (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A. Vishnevskiy) AMN SSSR.
(BURNS, surgery)
(SKIN TRANSPLANTATION)

VILYAVIN, G.D., professor; POMIN, N.N., podpolkovnik med.sluzhby, kand.med.nauk

Analysis of postoperative complications in acute appendicitis. Voen.-med.zhur. no.2:23-27 F '60. (MIRA 13:5)
(APPENDECTOMY compl.)

VILYAVIN, G. D. (Prof.); SHRAYBER, M. I. (Dr. Med. Sci.) and VISHNEVSKIY, A. A. (Prof.)
-- Moscow

"Thermal Burns."

report submitted for the 27th Congress of Surgeons of the USSR, Moscow, 23-28 May 1960

VILYAVIN, G.D., prof.

Importance of restorative substitution of the stomach with a loop of the small intestine following the resection and gastrectomy. Khirurgiia no.10:77-83 '61. (MIRA 14:10)

1. Iz Instituta khirurgii imeni A.V. Vishnevskogo (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A. Vishnevskiy) AMN SSSR.
(STOMACH—SURGERY) (INTESTINES—TRNASPLANTATION)

VILYAVIN, G.D.

40th anniversary congress of Polish surgeons. Vest. AMN SSSR 16 no.8:78-81 '61. (MIRA 14:12)
(POLAND--SURGERY--CONGRESSES)

VILYAVIN, G.D., prof.; NAZARENKO, A.I., kand.med.nauk

Reconstructive substitution of the resected stomach with a segment of the small intestine. Nov.khir.arkh. no.11:47-51 '61. (MIRA 14:12)

1. Tret'ye khirurgicheskoye otdeleniye (zav. - prof. G.D. Vilyavin) Instituta khirurgii im. A.V. Vishnevskogo AMN SSSR.
(STOMACH--SURGERY) (INTESTINE--TRANSPLANTATION)

VILYAVIN, G.D.; NAZARENKO, A.I.

Analysis of the surgical treatment of peptic ulcer of the stomach and duodenum. Sov. med. 25 no.4:24-29 Ap '62. (MIRA 15:6)

1. Iz Instituta khirurgii imeni A.V. Vishnevskogo (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A. Vishnevskiy) AMN SSSR.

(STOMACH--SURGERY) (DUODENUM--SURGERY)

VILYAVIN, Georgiy Danilovich, prof.; SHUMOVA, Olimpiada Vasil'yevna, kand. med.nauk; GINZBURG, R.L., red.; MIRONOVA, A.M., tekhn. red.

[Pathogenesis and treatment of burn disease] Patogenez i lechenie ozhogovoi bolezni. Moskva, Medgiz, 1963. 275 p. (MIRA 16:12)

(BURNS AND SCALDS)

SUKHININ, P.L., prof.; RUSANOV, S.A., prof.; GULYAYEV, G.V., doktor; BOLDINSKIY, I.I.. doktor; VILYAVIN, G.D., prof.; ZHOPOV, I.S., prof.; LIPSKIY, doktor; GOL'DBERG, F.I., doktor; ZHOPOV, I.S., prof.; VOLCHOK, Ye.V., doktor; MARTYNOV, A.T., doktor; GROZDOV, D.M., prof.; KOTOV, I.A., doktor; SKATIN, L.I., doktor; PIKOVSKIY D.L., doktor, dotsent; SMIRNOVA, Ye.S., doktor; SMOL'YANNIKOV, A.V., prof.; UKHANOVA, N.V., doktor; PETROV, B.A., prof.

Discussions at the session. Trudy Inst. im. N.V. Sklif. 9: 278-303 '63. (MIRA 18:6)

1. I gorodskaya bol'nitsa imeni Lenina, Saratov (for Skatin).
2. Kafedra gospital'noy khirurgii lechebnogo fakul'teta Gor'kovskogo meditsinskogo instituta (for Pikovskiy).
3. Gosudarstvennyy onkologicheskiy institut imeni Gertsena, Moskva (for Smirnova).

VILYAVIN, G.D., prof.; BELKIN, V.R.

Gastrectomy with plastic surgery of the small intestine performed with the suturing apparatus of the Scientific Research Institute of Experimental Surgical Apparatus and Instruments. Khirurgiia 39 no.10:18-20 O '63.

(MIRA 17:9)

1. Iz 3-go khirurgicheskogo otdeleniya (zav.-prof. G.D. Vilyavin) Instituta khirurgii imeni A.V. Vishnevskogo (dir.- deystvitel'nyy chlen AMN SSSR prof. A.A. Vishnevskiy) AMN SSSR i Nauchno-issledovatel'skogo instituta eksperimental'noy apparatury i instrumentov (dir. M.G. Anan'yev) Ministerstva zdravookhraneniya SSSR.

VILYAVIN, G.I., prof.; BERNOV, B.A.

Indications and choice of methodology of gastroplastic surgery in gastrectomy and resection of the stoma. Khirurgiia 40 no.9:4-9 S '64 (MIRA 18:2)

VILYAVIN, G.D.; SARKISOV, D.S.; DAUROVA, T.T.

Metastasis of ovarian ciliocpithelial cyst to the pancreas; one observation. Vop. onk. 11 no.12:88-89 '65. (MIRA 19:1)

1. Iz Instituta khirurgii imeni Vishnevskogo AMN SSSR (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A. Vishnevskiy).

VILYAVIN, G.D.; BERDOV, B.A.

Functions of digestive organs in late periods following gastrectomy combined with gastrojejunoplasty. Vest.AMN SSSR 20 no.7:30-36 '65. (MIRA 18:8)

1. Institut khirurgii imeni A.V.Vishnevskogo AMN SSSR, Moskva.

T. I. VILYAYEVSKAYA

Aviatsionnyye pribory i avtopiloty (Aircraft Instruments and Automatic Pilots). 1954, 212 p.

SOV / 124-58-5-5629

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 5, p 101 (USSR)

AUTHOR: Vilyayevskaya, T.I.

TITLE: Measurement of the Rate of Climb and Descent of Aircraft by Means of Capillaries of Various Designs (Izmereniye vertikal'noy skorosti samoleta s pomoshch'yu kapillyarov razlichnoy konstruktsii)

PERIODICAL: V kn.: Elementy rascheta tochnykh priborov. Moscow, Oborongiz, 1954, pp 112-118

ABSTRACT: Bibliographic entry

1. Rate of climb indicators--Design
2. Aircraft--Performance

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VILYAYEVSKAYA, T. I.

PHASE X TREASURE ISLAND BIBLIOGRAPHICAL REPORT AID 653 - X

BOOK Call No.: AF653651

Author: VILYAYEVSKAYA, T. I.
Full Title: AVIATION INSTRUMENTS AND AUTOMATIC PILOTS (A Short Course)
Transliterated Title: Aviatsionnyye pribory i avtopiloty (Kratkiy kurs)

PUBLISHING DATA

Originating Agency: None
Publishing House: State Publishing House of the Defense Industry (Oborongiz)
Date: 1954 No. pp.: 212 No. of copies: Not given
Editorial Staff
Editor: Veller, Ye. L.
Others: The author expresses thanks for valuable help to G. O. Fridlender.

PURPOSE AND EVALUATION: This is a textbook approved by the Ministry of the Defense Industry for a short course in tekhnikums on instruments of precision mechanics. It is a compilation of information on various kinds of instruments in which the author explains typical layouts of modern instruments in a clear and comprehensible way. However, he does not introduce any new ideas or designs.

TEXT DATA

Coverage: The book contains up-to-date information on aviation in-

struments for aircraft equipped with piston, jet and turbo-jet eninges. The author considers basic principles of operation of these instruments and automatic pilots, describes elements of their construction, and elaborates the problem of errors and their correction. He describes also in general terms the instruments controlling the operation of aviation engines, piloting and navigation instruments, and other automatic arrangements. Instruments which are not typical equipment of modern aircraft but are used also for other purposes, like d-c current tachometers, or tachometers with rectifiers, are not described in this book. The book also does not contain elements of instrument design or problems of their assembly, dismantling and operation. The book is well provided with good clear diagrams.

Table of Contents

Aviatsionnyye pribory i avtopiloty (Kratkiy kurs) AID 653 - X

No. of References: 13 Russian, 1938-1953
Facilities: None

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Vilyum B.F.

Hydrodynamic Theory of Horizontal Centrifugal Casting. B. F. Vilyum (*Izvest. Akad. Nauk S.S.S.R.*, 1954, [Tekhn.], 62 (10), 39–46).—[In Russian]. The problem of the motion of a heavy viscous liquid in a cylinder rotating about its horizontal axis is considered. This motion is described by a system of non-linear differential equations in partial differentials. The problem is solved by the method of approx. integration of the differential equations for a heavy viscous liq. for the case when the thickness of the liquid layer is small in relation to the radius of the cylinder.—S. K. L.

VILYUNAS, P. P.

1445 Opredeleniye nekctorykh fiziko-mekhanicheskikh svoystv dolomitov vepkhnego devona Litovskoy SSR, kak prirodnykh stroitel'nikh Kamney. Kaunas, 1954. 24 s. s graf. 20 sm. (Litov. s.-kh. akad.) 100 ekz. Bespl.-(54-51100)

SO: Knizhaya Letopis', Vol. 1, 1955

VILYUNAS, P. P.

"Determination of Some Physicomechanical Properties of Dolomites of the Late Devonian in the Lithuanian SSR as Natural Structural Stone." Cand Tech Sci, Lithuanian Agricultural Acad, Kaunas, 1954, (KL, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

VILYUNOV, G.A., polkovnik meditsinskoy sluzhby; STRABYKIN, G.M., polkovnik meditsinskoy sluzhby; KONSTANTINOV, K.P., podpolkovnik meditsinskoy sluzhby

Commander as the leader of sanitary education and training. Voen.-med. zhur. no.10:9-11 '64. (MIRA 18:5)

VILYUNOV, P.V.

In the section of the council of geological testimony. Razved. i okh. nedr 26 no.12:57-58 D '60. (MIRA 13:12)

1. Ministerstvo geologii i okhrany nedr SSSR.
(Ore deposits)

VILYUNOV, P.V.

Scientific and technical conference on prospecting methods.
Razved. i okh. nedr 27 no.2:18-24 F '61. (MIRA 14:5)

1. Ministerstvo geologii i okhrany nedr SSSR.
(Prospecting)

VILYUNOV, P V

AUTHOR: Vilyunov, P.V. SOV-132-58-8-15/16

TITLE: A Conference in Krivoy Rog (Na soveshchanii v Krivom Roge)

PERIODICAL: Razvedka i okhrana nedr, 1958, Nr 8, pp 61-62 (USSR)

ABSTRACT: In April 1958, a conference on the geology and origin of ferro-siliceous formations in the Ukraine was held in Krivoy Rog by the Academy of Sciences and the Central Geological Administration of the Ukrainian SSR. A total of 40 reports were read on the geologic structure of ferro-siliceous formations of the Ukraine and on the origin of rich iron ores of the Krivoy Rog basin. Active Member of the AS Ukr SSR, N.P. Semenenko, delivered a lecture on "Ferro-siliceous formations, their composition and location in the central part of the Ukrainian crystallic shield"; Ya.N. Belertsev, Member-Correspondent of the AS Ukr SSR, summed up the results of geological studies of the Krivoy Rog basin. He also lectured on the origin of iron ores in this basin, singling out three successive stages of ore formation in the basin: accumulation of sediments, their metamorphism and hypogenesis. Senior Geologist of the Leninruda Trust, A.T. Dzhedzalov, developed a contradictory point of view on the hypogene origin of the rich iron ores. A.I. Cherednichenko

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(AS Ukr.SSR), delivered a lecture on structural condition of the formation of ore deposits in the northern part of the Saksagan belt. M.A. Dobrokhotov, reported on deposits of the Kursk Magnetic Anomaly. By comparing them with deposits of the Krivoy Rog Basin, he proved their hypogene origin.

ASSOCIATION: Ministerstvo Geologii i Okhrany Nedr SSSR (The Ministry of Geology and Conservation of Mineral Resources of USSR)

1. Geologists--USSR 2. Iron ores--USSR

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VILYUNOV, P.V.

Conference on mining and field geology. Razved.i okh.nedr 26 no.5:62-63 My '60. (MIRA 13:7)

1. Ministerstvo geologii i okhrany nedr SSSR.
(Geology, Economic)

14(5)
25(5)

SOV/132-59-8-2/18

AUTHOR: Vilyunov, P.V.

TITLE: How to Further the Role and the Quality of Work of the Mining Geological Service

PERIODICAL: Razvedka i okhrana nedr, 1959, Nr 8, pp 9 - 13 (USSR)

ABSTRACT: The author complains that the importance of geological service in mines and pits is still underestimated by many sovnarkhozes and mining organizations. The absence of precise instructions on how to organize such a service allows each organization to treat this problem differently or ignore it altogether. For instance, the Trest Gruzuglerudrazvedka (Gruzuglerudrazvedka Trust) was created in the Gruzinskaya SSR for the control of mining operations, but only one geologist was employed by the sovnarkhoz to supervise geological service in mines and pits. On the other hand, the author cites the example of

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How to Further the Role and the Quality of Work of the Mining Geological Service

the Lugansk sovnarkhoz, where the Trest shakhtnoy geologii i tekhnicheskogo bureniya (Trust of Mining Geology and Technical Drilling) was created and put in charge of all geological services and operations. It also dealt with all arising problems of exploitation. As a rule, the personnel of the geological service of the mining industry is composed of men with only a secondary technical school diploma, or of men with a good practical knowledge of procedure. For instance, only 8% of the specialists employed in over 60 various organizations of the Sverdlovsk sovnarkhoz (the Serov Combine, North Ural bauxite Mines, the Tur'ya rudoupravleniye (Tur'ya Mining Directorate), the Alapayevsk Combine, the trest Volchanskugol' (the Volchanskugol' Trust) etc. have higher education diplomas. The chief geologists of the Dastakertskoye i Zangezurskoye rudoupravleniye Armyanskogo sovnarkhoza (the Dastakert and

How to Further the Role and the Quality of Work of the Mining Geological Service

Zangezury Mining Directorates of the Armenian sovnarkhoz), of the Tekeli and Karamazar Mines of the Kansayskiy Kombinat (the Kansay Combine), the Chorokh-Dayron and Dzhilaus Mining Directorates of the Tadzhik sovnarkhoz, of the Kugitang-Tau Mine of the Turkmenian sovnarkhoz, of the ozocerite Shor-Su Mine of the Fergana sovnarkhoz, the Gul'shady Mine of the Karaganda sovnarkhoz and of many other organizations have only secondary technical school diplomas. The large Akhtaly Mine of the Armenian sovnarkhoz has no chief geologist at all. The chief geologists of the Sokolovo and Sarbay Mines of the Kustanay sovnarkhoz are experienced workers without any special technical education. The Balkhash and Maykanzoloto Combines of the Karaganda sovnarkhoz have no specialists with higher education diplomas. The following organizations have no geologists at all: 14 mines and opencast mines of the Kuzbassugol'

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Combine, 8 mines of the Vorkutaugol' Combine, the Kayrakty barite-polymetallic mine of the Karaganda Combine, the Karakum sulfur and Oglanly bentonite mines of the Turkmenian sovnarkhoz, the Amalyk Mining Directorate of the Kirgiz sovnarkhoz, trest Novosibugol' (the Novosibugol' Trust), building material enterprises of the Belorusskaya SSR, Latviyskaya SSR, almost all local organizations for drilling of water wells. Because of the unsatisfactory organization of the geological exploitation service, many industries continue their work without technical plans and approved reserves. In the Armyanskaya SSR, 51 building material enterprises are working without approved plans, and 15 - without approved reserves. Mining operations at the Shamlug and Ognevo mines are carried out without technical plans. The same situation is true at 28 building material enterprises of the Kareliya, Murmansk and Belorus-

How to Further the Role and the Quality of Work of the Mining Geological Service

sian sovnarkhozes. Geological documentation is not being studied sufficiently. Moreover, this documentation, often prepared by an inexperienced and non-specialized staff, is incomplete and unreliable. Hydrogeological service in mines is also badly organized, or does not exist at all, as for instance in mines of the Belogorka Combine, the Leninogorsk Combine of the East-Kazakhstan sovnarkhoz. The control of the technology of mining works is also insufficiently organized. Huge losses have been registered in all branches of the mining industry. General gas losses in the oil-fields were 4 billion cu m in 1957. In the Krivoy Rog Iron Ore Basin, losses of rich ores due to faulty mining procedure reach 16-17% (in some cases 24-29%) of the total annual production. Several millions of tons of manganese were lost in 7 years at the Chiatury deposit. Even larger losses occurred during the con-

How to Further the Role and the Quality of Work of the Mining Geological Service

centration process of manganese ore. Of the general quantity of processed ore in the 1953-1958 period, 44.6% was lost in tailings, with an average manganese contents of over 18%. Selective mining is still tolerated in many mines, and only the richest parts of deposits are extracted. Such an extraction of asbestos at the Bazhenovo deposit has caused huge losses. Out of a general annual production of 10-12 million tons, 4 to 5 million with a 2% asbestos content are dumped; this is a net yearly loss of 100,000 tons of industrial asbestos. The author says that the cited examples are only a sample of the losses caused by the faulty organization of the geological service. He urges the development of special rules and regulations on the organization of these services.

SOV/132-59-8-2/18

How to Further the Role and the Quality of Work of the Mining Geological Service

ASSOCIATION: Ministerstvo geologii i okhrany nedr SSSR (Ministry of Geology and Conservation of Mineral Resources of the USSR)

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VILYUNOV, P.V.

Technical problems relating to the introduction of geological prospecting equipment. Razved. i okh. nedr. 23 no.11:43-49 N '57. (MIRA 10:11)

1. Ministerstvo geologii i okhrany nedr SSSR.
(Prospecting--Equipment and supplies)

Vilyunov P.V.

AUTHOR: Vilyunov, P.V. 132-11-6/7

TITLE: Problems of Technical Re-equipment of Geological Prospecting Field Work (Problemy tekhnicheskogo perevooruzheniya geologo-razvedochnykh rabot)

PERIODICAL: Razvedka i okhrana nedr, 1957, No 11, pp 43-49 (USSR)

ABSTRACT: To improve prospecting methods, modern equipment and methods were applied in the USSR after 1945. As a result of extensive research conducted by the Ministry of Geology and Conservation of Natural Resources, several types of core drill derricks ("ЗИФ") were designed for drilling depths of 75, 150, 300, 650 and 1,200 m. The number of types of derricks were increased, and the percentage of new derricks in operation increased from 17.8% in 1950 to 43% in 1956. The Sixth 5-Year Plan calls for a further increase of new type derricks up to 92%. The Soviet made drills were equipped with efficient nozzles, and were considered not to be inferior to foreign makes. Depths of 1,520 m were reached with the derrick "ЗИФ-1200А" , 820 m with "ЗИФ-650А" and 450 m with "ЗИФ-30Ј" whereby these depths were exceeded when by diamond bits are used. Some of the derricks were adapted to be moved on trucks or trailers. Besides core drill derricks, derricks of the

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Problems of Technical Re-equipment of Geological Prospecting Field Work

"БС-3А" type were self-propelled and equipped with worm gears. Ready for series production were the self-propelled derricks "УГБ-50А " equipped for worm, percussion and core drilling of hydro-geologic bore holes up to a depth of 50 m. In 1957, preparatory work for the construction of test derricks for drilling 3-4 m deep holes for metallometric sampling were completed. In 1957, series production was taken up of the derricks "ОГХ-8 " adapted for the cleaning of clay solutions. During 1957 the drilling unit "МР-1", equipped with a folding mast and adapted for drilling operation with " КА-2М-300 ", "ЗИФ-300" and "ЗИФ-150 " was tested for production. In 1953, manufacture of 8 faceted bits " ОКВ" and improved ribbed bits "КР" was taken up. Production of new hard-alloy bits increased to 750,000 bits in 1956, and the manufacture of bits with new geometrical shape and new durable alloys was started. Tested were 2 faceted bits of the type "МР2-НП" made of the alloys "ВК-8" and "ВК-6" , by which drilling speed was increased by 25%. Coreless drilling by means of conventional and 3-ball chisels was extensively applied. The use of "36Г2С" steel for drill pipes was definitely approved. Experiments were conducted in conjunction with the Sverdlovsk Mining In-

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Problems of Technical Re-equipment of Geological Prospecting Field Work

stitute with wear-resisting drill pipes and new brands of thermal-treated steel. Introduction of new equipment increased drilling efficiency by 64% and lowered cost of drilling operations. The following drilling operation problem have to be solved for the purpose of improving the efficiency of crushing rocks by electro-hydraulic means, by using ultra and infra sound waves, and by applying various improved drilling equipment and methods. The author cites several new machines, such as the drill "ШПА-2", the freight-passenger winch "ЛППГЛ-230" , rotary pump "ЦПН-30"and other mining equipment. Lately, the manufacture of geophysical appliances has gained importance, among which are semi and full-automatic aeromagnetometers, "АМ-9Л" , "АЭМ-49", gravimeters "СН-3", "ГАК-3", various radiometers, agromagnetometers, "АЭМ-13", quartz magnetometers "М-14", gravitational variometers "ГВ-1" hygroscopic inclinometers "ИГ-2" and other instruments. Bebinning in 1953, physico-chemical analyzing methods were widely applied in USSR laboratories, such as spectrographs, polarygraphs, polarymeters, luminescent apparatus, apparatus for X-ray structural analysis, electronic microscopes etc. During

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Problems of Technical Re-equipment of Geological Prospecting Field Work

the past year methods of prospecting for minerals had basically changed, especially by the use of geophysical methods, such as television, telemechanics, and electronics.

ASSOCIATION: Ministry of Geology and Conservation of Natural Resources of the USSR (Ministerstvo geologii i okhrany nedr SSSR)

AVAILABLE: Library of Congress

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VILYUNOV, V.N.; SIDONSKIY, O.B.

On the theory of the inflammation of condensed systems by an incandescent surface. Dokl. AN SSSR 152 no.1:131-133 S '63. (MIRA 16:9)

1. Sibirskiy fiziko-tekhnicheskiy institut Tomskogo gosudarstvennogo universiteta im. V.V.Kuybysheva. Predstalveno akademikom Ya.B.Zel'dovichem.

(Combustion) (Fuel)

88576
S/020/61/136/001/029/037
B004/B056

11,7200

AUTHOR: Vilyunov, V. N.

TITLE: On the Mathematical Theory of the Steady Rate of Combustion of a Condensed Substance

PERIODICAL: Doklady Akademii nauk SSSR, 1961, Vol. 136, No. 1, pp. 136-139

TEXT: The present paper is based on the mathematical theory of explosives combustion at high pressure, which was established by Ya. B. Zel'dovich, and gives an extension of this theory to low pressures. In accordance with Refs. 2, 3, a three-stage model of burning (α, β, γ stages) is assumed and the process is investigated in a coordinate system moving with the flame. For steady flame propagation by means of heat diffusion in the i stage, the following is written:
$\lambda_i T'' - c_i m T' + Q_i f_i(n,T) = 0$ (1); $\rho_i D_i n'' - mn' - f_i(n,T) = 0$ (2).
The notations are: $T(y)$ temperature, $n(y)$ ratio of the concentrations of the reacting substance, λ_i thermal conductivity coefficient, D_i diffusion coefficient, c_i specific heat, Q_i thermal effect of the reaction, $f_i(n,T)$

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On the Mathematical Theory of the Steady Rate of Combustion of a Condensed Substance

total rate of the chemical reaction, m mass rate of combustion, ρ_i density. For the α stage (condensed phase) it is assumed that $D_\alpha = 0$ and $f_i(n,T)$ is independent of pressure. (1) and (2) yield $\lambda_\alpha T'_s = c_\alpha m(T_s - T_0) - mQ_\alpha$ or $\lambda_\alpha T'_s = c_\alpha m(T_s - T_{s1})$ (3). T_s denotes surface temperature of the condensed phase parametrically depending on pressure p and initial temperature T_0; $Q_\alpha = c_\alpha(T_{s1} - T_0)$; T_{s1} - surface temperature in the case of flameless combustion. Mass rate of combustion is calculated by integrating (1) with $i = \alpha$ and boundary conditions $y = -\infty$, $T = T_0$, $(T'(-\infty) = 0)$; $y = 0$, $T = T_s$, $\lambda_\alpha T'_s = c_\alpha m(T_s - T_{s1})$ (4).
$m^2 = 2\delta k_\alpha K_\alpha RT_s^2/E_\alpha(2T_s - T_{s1} - T_0)\exp(-E_\alpha/RT_s)$ (5) was found by means of an approximation method by Ya. B. Zel'dovich and D. A. Frank-Kamenetskiy (Ref. 4). δ density of the powder, k_α factor of the exponential function, K_α thermal diffusivity of the condensed phase. The width of the heating

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region of the condensed phase is approximatively expressed by $y_\varkappa = (\lambda_\varkappa/c_\varkappa m)\ln[0.05T_0/(T_s - T_0)]$ (6). Exothermic reaction leading to products of incomplete combustion (NO, CO) is assumed for the β-stage. This is the final stage in the case of low pressure. Maximum temperature is T_{11}. In the case of high pressure, the flame stage (γ-stage) exerts an effect upon the β-stage process so that at the boundary of β- and γ-stage $T_1 > T_{11}$. Like T_s, T_1 is assumed to depend parametrically on p and T_0. $D_\rho = \lambda_\beta/c_\beta\rho_\beta$. From (1) with $i = \beta$, $n = a/a_{s1} = (T_1 - T)/(T_1 - T_s)$ (7) is obtained. Integration of (1) with $i = \beta$ and the boundary conditions $y = 0$, $T = T_s$, $\lambda_\varkappa T_s' = c_\varkappa m(T_s - T_{s1})$; $y = y_1$, $T = T_1$, $\lambda_\beta T_1' = c_\beta m(T_1 - T_{11})$ (8) results in (Ref. 4):

$$m^2 = \frac{2\lambda_\beta Z_\beta(\nu_\beta)!\left(\frac{RT_1^2}{E_\beta}\right)^{\nu_\beta+1}}{c_\beta(2T_1 - T_{11} - T_{s1})(T_1 - T_s)^{\nu_\beta}} e^{-E_\beta/RT_1},\quad Z_\beta = k_\beta\mu_\beta a_{s1}^{\nu_\beta-1}\left(\frac{p}{RT_1}\right)^{\nu_\beta} \quad (9).$$

$f_\beta(T) = k_\beta(\mu_\beta/a_{s1})(a_s p/RT)^{\nu_\beta}\left[(T_1 - T)/(T_1 - T_s)\right]^{\nu_\beta}\exp(-E_\beta/RT)$ (10) is

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written for the total rate of the chemical reaction. Notations: μ_β mean molecular weight, ν_β summational order of the reaction, E_β effective activation energy, a_{s1} relative concentration of reacting substance at the interface of α- and β-stage in the case of flameless combustion, a_s relative concentration when gaseous phase affects condensed phase. In equation (9), a_s was set $\equiv a_{s1}$. The exothermic reaction between the products of the β-stage (NO,CO) takes place in the γ-stage (flame stage). $D_\gamma = \lambda_\gamma/c_\gamma\rho_\gamma$ is assumed and $n = (T_{21} - T)/(T_{21} - T_1)$ is found. Integration of (1) with $i = \gamma$ and boundary conditions $y = y_1$, $T = T_1$, $\lambda_\beta T_1' = c_\beta m(T_1 - T_{11})$; $y = +\infty$, $T = T_{21}(T'(+\infty) = 0)$ (12) gives

$$m^2 = \frac{2\lambda_\gamma Z_\gamma(\nu_\gamma)!(RT_{21}/E_\gamma)^{\nu_\gamma+1}}{c_\gamma(T_{21} - T_{11})(T_{21} - T_1)^{\nu_\gamma}} e^{-E_\gamma/RT_{21}};\quad Z_\gamma = k_\gamma\mu_\gamma a_1^{\nu_\gamma - 1}\left(\frac{p}{RT_{21}}\right)^{\nu_\gamma} \quad (13).$$

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The dependences of $m = m(p,T_0)$, $T_s = T_s(p,T_0)$, $T_1 = T_1(p,T_0)$ may be computed by means of (5), (9), and (13). Calculation is simplified in the case of low pressure since the flame stage does not occur ($T_1 \equiv T_{11}$). In this case pressure coefficient k_p and temperature coefficient k_T assume the form of (15) and (16):

$$k_p = \left(\frac{\partial \ln m}{\partial \ln p}\right)_{T_0} \simeq \frac{\nu_\beta}{2}\left[1 - \frac{\nu_\beta}{T_{11} - T_s}\frac{RT_s^2}{E_\alpha}\right]^{-1}, \qquad (15)$$

$$k_T = \left(\frac{\partial \ln m}{\partial T_0}\right)_p \simeq \frac{k_p}{\nu_\beta}\left[\frac{E_\beta}{RT_{11}^2} - \frac{\nu_\beta}{T_{11} - T_s} + \frac{\nu_\beta + 2}{T_{11}}\right] \qquad (16)$$

On the basis of these equations calculation was made for nitroglycerine powder the composition and experimental data of which are given in Ref. 6. The following data were used as a basis: $T_{s1} = 700^\circ K$, $E_\alpha = 32000$ cal/mole, $\delta = 1.6$ g/cm^3, $c_\alpha = c_\beta = 0.35$ cal·g·degree, $T_{11} = 1085^\circ K$, $E_\beta = 21000$ cal/mole, $\lambda_\alpha = \lambda_\beta = 4 \cdot 10^{-4}$ cal/cm·sec·degree, $\mu_\beta = 27$ g/mole,

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$k_\beta = 0.93 \cdot 10^{10}$ sec^{-1}, $\nu_\beta = 1$. The results of this calculation are compiled in Table 1. A. G. Merzhanov and F. I. Dubovitskiy are mentioned in the paper. There are 1 table and 6 references: 5 Soviet and 1 British.

4

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete im. V. V. Kuybysheva (Siberian Institute of Physics and Technology at Tomsk State University imeni V. V. Kuybyshev)

PRESENTED: July 2, 1960 by V. N. Kondrat'yev, Academician

SUBMITTED: June 23, 1960

L 22786-66 EWT(1)/EWT(m) IJP(c) WW/JWD/GG

ACC NR: AP6011502 SOURCE CODE: UR/0414/65/000/004/0039/0043

59
B

AUTHOR: Vilyunov, V. N. (Tomsk); Sidonskiy, O. B. (Tomsk)

ORG: none

TITLE: The problem of igniting condensed systems with radiation energy

SOURCE: Fizika goreniya i vzryva, no. 4, 1965, 39-43

TOPIC TAGS: solid propellant, propellant, combustion, combustion instability

ABSTRACT: The ignition of a solid propellant induced by light irradiation was analyzed using a simple propellant model. It was assumed that a constant light flux incident on the propellant surface accelerates the chemical reaction which leads to heating of the surface layers; after expiration of a certain period, the light irradiation is stopped and an adiabatic induction period starts; after the induction period, the propellant either ignites or is extinguished depending on the surface temperature. Analysis of the temperature variation under these conditions yielded temperature vs. time curves for various propellant parameters. The curves show either extinction or transition to normal combustion. An interesting result of the analysis was that the burning velocity during transition to normal combustion fluctuates with damped oscillations. Two formulas for calculating the induction period were derived. Orig. art. has: 4 figures and 8 formulas. [PV]

SUB CODE: 21/ SUBM DATE: 05Jun65/ ORIG REF: 007/ ATD PRESS: 4229

Card 1/1 dda

S/020/61/136/002/027/034
B004/B056

116200 also 3015, 3115.

AUTHOR: Vilyunov, V. N.

TITLE: Theory of the Erosive Burning of Powders

PERIODICAL: Doklady Akademii nauk SSSR, 1961, Vol. 136, No. 2, pp. 381-383

TEXT: The acceleration of powder burning by a turbulent gas flowing above the burning surface is dealt with. Basing upon the theory of steady burning, this problem is theoretically investigated in the present paper. A semi-infinite strip of burning powder is assumed, and the set of equations $\overline{\rho v} = m_t = \text{const}$, $p = \text{const}$ (1); $\overline{\rho v}\,du/dy = (d/dy)\left[(\mu + \mu_t)(d\bar{u}/dy)\right]$ (2); $c\overline{\rho v}\,d\bar{T}/dy = (d/dy)\left[(\mu+\mu_t)(d\bar{T}/dy)\right] + Qf(\bar{a},\bar{T})$ (3); $\overline{\rho v}\,d\bar{a}/dy = (d/dy)\left[(\mu + \mu_t)d\bar{a}/dy\right] - f(\bar{a},\bar{T})$ (4) is written. m_t denotes the mass velocity of burning in a turbulent flow, $\bar{\rho}$ - the density, $\bar{v}$ - the projection of the velocity on the y-axis; $\bar{u}$ is the

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projection of the rate upon the x-axis, μ_t - the coefficient of "turbulent" dynamic viscosity, $\overline{T}$ - the temperature, $\overline{a}$ - the relative concentration of the reacting substance, Q - the thermal effect, $f(\overline{a},\overline{T})$ - the total rate of the chemical reaction, c - the specific heat. With regard to the other denotations, reference is made to Ref. 4. The following is assumed: $c\mu = \lambda$; $\nu = D$, $c\mu_t = \lambda_t$; $\nu_t = D_t$ (5), where λ, D, ν are the molecular coefficients of thermal conductivity, diffusion, and kinetic viscosity, respectively, and λ_t, D_t, ν_t are the coefficients for a turbulent motion. From (3) and (4), the following is written as the first integral:

$\overline{a}/a_{s1} = (\overline{T}_{11} - \overline{T})/(\overline{T}_{11} - \overline{T}_{su})$ (6), and the equation

$$\lambda \frac{d}{dy}\left[\left(1+\frac{\nu_t}{\nu}\right)\frac{d\overline{T}}{dy}\right] - cm_t\frac{d\overline{T}}{dy} + Q_s f_s(\overline{T}) = 0. \quad (7)$$

is obtained. $m_t = \overline{B_{\alpha t}}\exp(-E_\alpha/2RT_{su})$ (8) holds for the α-stage. The surface temperature $\overline{T}_s$ of the condensed phase is denoted by the index u

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because it depends parametrically on the flow velocity.
$\mathcal{E} = m_t/m = \exp\left[(E_\alpha/2R)(1/\bar{T}_s - 1/\bar{T}_{su})\right]$ (9) is given for the erosion ratio $\mathcal{E}$. For the β-stage one obtains $\sigma_s = (\mu + \mu_t)d\bar{u}/dy - m_t\bar{u}$ (10) by integration of (3), where σ_s is the tangential stress of friction on the burning surface of the condensed phase. This equation is simplified by neglecting the temperature drop and the onflow of gas from the burning surface: $\sigma_s/\rho_{11} = (\nu_1 + \nu_{t1})d\bar{u}/dy$; $\nu_1 = \mu/\rho_{11}$; $\nu_{t1} = \mu_t/\rho_{11}$ (11). By introduction of the dynamic velocity $u_\tau = \sqrt{\sigma_s/\rho_{11}}$ and the dimensionless distance $y^* = u_\tau y/\nu_1$ from the wall one finds:
$d(\bar{u}/u_\tau)/dy^* = (1 + \nu_{t1}/\nu_1)^{-1}$ (12). The simplified reaction $(\lambda d/dy)\left[(1 + \nu_{t1}/\nu_1)(d\bar{T}/dy)\right] = -Q_\beta t_\beta(\bar{T})$ (17) for the zone of the chemical reaction of the β-stage holds. $(m_t/m)^2 = (\bar{T}_{11} - \bar{T}_s)/(\bar{T}_{11} - \bar{T}_{su}) + (\sqrt{k_1}/2\sqrt{2})\ln\left[(\bar{T}_{11} - \bar{T}_{s1})/(\bar{T}_{su} - \bar{T}_{s1})\right]$ $(\rho_{11}u_{mean}/m)\sqrt{\lambda_{res}}$ (20) is found

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Theory of the Erosive Burning of Powders

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for the erosion ratio. k_1 is a constant, u_{mean} is the mean flow velocity in the cross section, λ_{res} - the resistance coefficient which, in first approximation, equals $0.0032 + 0.221/Re^{0.237}$ (21). By means of equations (9) and (20), the problem of the erosion burning of powders is, in principle, solved. Fig. 1 compares the results of the calculation for nitroglycerin for $Re = 10^6$ with experimental data taken from Ref. 3. If ζ is not represented as a function of the gas velocity but as a function of the dimensionless complex $J = (\rho_{11} u_{mean}/m)\sqrt{\lambda_{res}}$, the experimental data for various types of fuels can probably be reduced to a master curve. Ya. B. Zel'dovich and D. A. Frank-Kamenetskiy are mentioned. There are 1 figure and 7 references: 4 Soviet, 1 US, and 1 French.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut Tomskogo gosudarstvennogo universiteta im. V. V. Kuybysheva (Siberian Institute of Physics and Technology of the Tomsk State University imeni V. V. Kuybyshev)

ACC NR: AP6029759 (N) SOURCE CODE: UR/0414/66/000/002/0077/0082

AUTHOR: Vilyunov, V. N. (Tomsk)

ORG: none

TITLE: On the heat theory of ignition

SOURCE: Fizika goreniya i vzryva, no. 2, 1966, 77-82

TOPIC TAGS: heat ignition, ignition point, fuel ignition, combustion theory

ABSTRACT: Working formulas are derived on the basis of the theory of spontaneous ignition developed by Yu. B. Zel'dovich for calculating warm-up time and temperature and ignition time. These formulas are then applied to two specific cases: heat ignition of a translucent fuel by radiant energy and heat ignition of fuel in a gas flow. For the latter case, it is shown that the formulas give a good approximation of the ignition time over the entire range of Nusselt numbers. The case of burnout of fuel during ignition is not considered. Orig. art. has: 3 figures, 22 formulas.

SUB CODE: 21,07/ SUBM DATE: 05Jun65/ ORIG REF: 008

UDC: 536.46

Card 1/1

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POLAND/Forestry. Forestry and Forest Cultivation. J-3

Abs Jour: Referat Zh-Biol., No 6, 1957, 22560

Author : Vilyush
Inst : o
Title : Methods of Studying the Effect of Protective Forest Plantings on the Microclimate.

Orig Pub: Ekol. polska, 1956, B2, No 1, 33-40

Abstract: The need is noted for developing a single method to study the effect of protective forest plantings on the microclimate of adjacent fields. A separated field strip stretching perpendicularly in the direction of prevailing winds, located on a territory with a similar soil cover and a level surface should be chosen as the object of the study. As an example, the method as used in the experimental station of Turvi is cited, where observations are conducted on a strip 2000 m long, 36 m wide and 15 m high. Among the components: acacia with an admixture of oak

Card : 1/2 -4-

Abs Jour: Referat Zh-Biol., No 6, 1957, 22560

and larch. Observation points are located in the middle, on the edges and at distances from the strip multiples of its height (h): 1 h, 4h, 8h, 16h (control point 24h). The observations are conducted all year round (the observation instruments are listed). Also, observations are conducted on the shadow lengths extended from the strip and the period of shading; of the soil humidity to a depth of 120 cm and soil temperature at a depth of 5, 10, 20 and 50 cm, over snowfall and to the depth of soil-freezing. The time of observation changes during the year depending on the length of daylight, which differs from the usual observation methods of meteorological stations. In addition to the microclimatic observations are the phenological observations of growth and development of agricultural plants which grow under the protection of the forest strip.

SOBOLEV, N.D.; LEBEDEV-ZINOV'YEV, A.A.; NAZAROVA, A.S.; VILYUNOVA, L.P.; BATALOV, Sh.S.; BRYLINA, O.M.; AFANAS'YEVA, L.K.; OVCHINNIKOVA, S.V.; red.izd-va; OVANOVA, A.G., tekhn.red.

[Neogene intrusives and the pre-Mesozoic base in the region of Caucasian mineral waters] Neogenovye intruzivy i domezozoiskii fundament raiona Kavkazskikh mineral'nykh vod. Moskva, Gos.nauchno-tekhn.izd-vl lit-ry po geol. i okhrane nedr, 1959. 208 p. (Moscow. Vsesoiuznyi nauchno-issledovatel'skii institut mineral'nogo syr'ia. Trudy, no.3). (MIRA 12:11)

(Caucasus, Northern--Rocks, Igneous)

ACC NR: AP7000345 (A,N) SOURCE CODE: UR/0413/66/000/022/0107/0108

INVENTOR: Vimba, A. A.; Greben'kov, Zh. A.; Kuzin, S. M.; Ostapenko, V. A.

ORG: none

TITLE: Device for measuring the temperature of gas in a flow. Class 42, No. 188712

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 22, 1966, 107-108

TOPIC TAGS: gas flow, measurement, temperature measurement, TEMPERATURE [redacted] instrument

ABSTRACT: An Author Certificate has been issued for a device for measuring the temperature of gas in a flow. The device consists of a shielded thermocouple located in a gas-forming plug housing into which gas is sucked from a stream in a sealed outer housing equipped with a connecting pipe for bringing in compressed air. To keep drops of the evaporating liquid and hard particles from hitting the hot thermocouple's junction, it is equipped with an air-mechanical shield (together forming a baffle) made in the form of a cylindrical plug with a conical skirt attached to the inlet of the outer housing, and with a compressed air stream going out through an annular slit between the conical skirt and the conical part of the gas-forming plug. Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 20Apr65/

Card 1/1 UDC: 536.532.541.12.012.6

[redacted]

GENERAL

PERIODICALS: VESTIS, No. 8, 1958

VIMPA, B. Characteristics and ways of using Latvian sapropels. In Russian. p. 43

Monthly list of East European Accessions (EEAI) LC, Vol. 8, No. 2, February 1959, Unclass.